Europäisches Patentamt

European Patent Office

Office européen des brevets



(11) EP 0 811 789 A1

(12)

EUROPEAN PATENT APPLICATION

published in accordance with Art. 158(3) EPC

(43) Date of publication: 10.12.1997 Bulletin 1997/50

(21) Application number: 96938505.3

(22) Date of filing: 20.11.1996

(51) Int. Cl.6: F16H 53/06

(86) International application number: PCT/JP96/03390

(87) International publication number: WO 97/19278 (29.05.1997 Gazette 1997/23)

(84) Designated Contracting States: DE FR GB

(30) Priority: 21.11.1995 JP 302763/95 21.11.1995 JP 302765/95

(71) Applicant: KOYO SEIKO CO., LTD. Osaka-shi, Osaka 542 (JP)

(72) Inventor: SADA, Takashi Chuo-ku, Osaka-shi, Osaka 542 (JP)

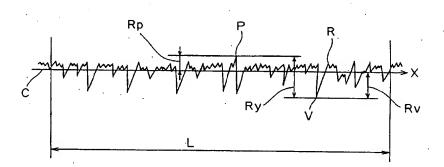
(74) Representative:
Popp, Eugen, Dr. et al
MEISSNER, BOLTE & PARTNER
Widenmayerstrasse 48
80538 München (DE)

(54) MECHANICAL PART

(57) A mechanical part having a rolling contact surface (11a) with many isolated minute recesses. A maximum height Ry of a roughness curve R obtained by cutting this contact surface (11a) with a plane perpendicular thereto is 1-3 μm, and a peak height Rp with respect to the center line of the roughness curve R and a valley depth Rv with respect thereto have the relation of Rp/Rv≤0.3. This indicates that the contact surface

(11a) has very low peaks of a relatively high distribution and very deep valleys of a relatively low distribution. Owing to the very low peaks of a relatively high distribution, a sufficiently wide contact area is secured. Owing to the valleys of a low distribution and a large depth, oil reservoirs of a sufficient capacity are formed.

F I G. 1



EP 0 811 789 A